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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,631	07/15/2003	Hideo Aoki	04173.0435	5662

7590 02/04/2005

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1300 I Street, N.W.
Washington, DC 20005-3315

EXAMINER

GOODROW, JOHN L

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 02/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/618,631

Applicant(s)

AOKI ET AL.

Examiner

John L Goodrow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 has a method of manufacturing of "at least one" and then "forming a first pattern and forming a second pattern". It appears that there are two methods of manufacturing a circuit both form a pattern both have a photosensitive base and one uses a charged particle and the other uses a metal-containing charged particle to form a image on the photosensitive base. Both methods of manufacturing an electronic circuit use an electroless plating however the use of the plating with a non-metallic image is not shown in the specification. Claim 3 & 9 the B-staged thermosetting resin is indefinite. Claim 6 what is the meaning of "good enough or not".

4. Claims 15,16,19, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The pattern recognizing unit and the position correcting mechanism are not shown in any form in the specification.

Claim Rejections - 35 USC § 103

Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eberlein et al in view of Okamoto et al and Oka. Eberlein et al teaches the method of manufacture of printed wiring boards in which a an image is formed on a image receiving layer and no mask is needed to form the image note Col. 1 line 65-67. The image is formed from an electrically conductive toner note Col.2 lines 35-40. The image is transferred to a receiving sheet note Col.4 lines 49-54. This allows the imaging surface to be reused note Col. 4 lines 55-60. The transferred image can be electroplated with copper to provide thicker cross sections note Col.6 lines 4-5. Eberlein fails to teach an intermediate transfer member and a toner additive of a fluorescent substance Oka teaches the fluorescent substance in a toner composition note Col. 3 lines 5-10 which has a metal in the toner used in an electrostatic copiers note Col.1 line 61. Okamoto et al teaches the use of an intermediate transfer member used in an electrophotographic apparatus. It would be obvious to one of ordinary skill in the art at the time of applicants' invention with a reasonable expectation of success to use the intermediate transfer member and the dye in the toner composition which is the conductive toner in the method of manufacture of printed wiring boards and circuitry of Eberlein et al. as a means of fixing a transferred visible image.

Claims 13-20 are rejected under 35 U.S.C. 103(a) as being obvious over Okamoto et al in view of Japan 2001-284769. Okamoto et al teach the use of an intermediate transfer member that is used in the transfer of an electrostatic image and the use of heat in the

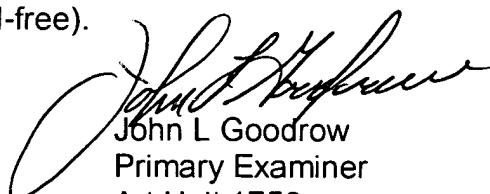
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transfer of the image. Okamoto et al fails to teach the formation of a circuit pattern with the transferred image. Japan 2001-284769 teaches the use of a toner which is a chargeable powder for circuit formation and transfers the image to a sheet. It would be obvious to one of ordinary skill in the art at the time of applicants' invention with a reasonable expectation of success to use the chargeable powder toner in the transfer process of Okamoto et al in which the powder toner forms a circuit pattern on the recording sheet.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John L Goodrow whose telephone number is 571-272-1384. The examiner can normally be reached on Monday -Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark F Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John L Goodrow
Primary Examiner
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